

DEPARTMENT OF REGULATORY AND ECONOMIC RESOURCES (RER) BOARD AND CODE ADMINISTRATION DIVISION

## **NOTICE OF ACCEPTANCE (NOA)**

MIAMI-DADE COUNTY
PRODUCT CONTROL SECTION
11805 SW 26 Street, Room 208
T (786) 315-2590 F (786) 315-2599
www.miamidade.gov/economy

ES Windows, LLC 3550 NW 49 Street Miami, FL 33142

Scope:

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed and accepted by Miami-Dade County RER - Product Control Section to be used in Miami Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

This NOA shall not be valid after the expiration date stated below. The Miami-Dade County Product Control Section (In Miami Dade County) and/or the AHJ (in areas other than Miami Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify, or suspend the use of such product or material within their jurisdiction. RER reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Section that this product or material fails to meet the requirements of the applicable building code.

This product is approved as described herein, and has been designed to comply with the Florida Building Code, including the High Velocity Hurricane Zone.

DESCRIPTION: Series "5100 Fixed Casement" Aluminum Fixed Window - L. M. I.

APPROVAL DOCUMENT: Drawing No. W11-15, titled "Series 5100 Aluminum Fixed Wdw. (L.M.I.)", sheets 1 through 7 of 7, dated 03/22/11, with revision D dated 05/06/15, prepared by Al-Farooq Corporation, signed and sealed by Javad Ahmad, P.E., bearing the Miami-Dade County Product Control Revision stamp with the Notice of Acceptance number and expiration date by the Miami-Dade County Product Control Section.

## MISSILE IMPACT RATING: Large and Small Missile Impact Resistant

LABELING: Each unit shall bear a permanent label with the manufacturer's name or logo, Barranquilla, Colombia S.A., model/series, and following statement: "Miami-Dade County Product Control Approved", unless otherwise noted herein.

**RENEWAL** of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

**TERMINATION** of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

**ADVERTISEMENT:** The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

**INSPECTION:** A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.

This NOA revises NOA# 12-0223.43 and consists of this page 1 and evidence pages E-1 and E-2, as well as approval document mentioned above.

The submitted documentation was reviewed by Manuel Perez, P.E.

MIAMI DADE COUNTY

M 15/14/15

NOA No. 15-0129.04 Expiration Date: September 22, 2016 Approval Date: May 14, 2015 Page 1

## ES Windows, LLC

### NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

#### A. DRAWINGS

- 1. Manufacturer's die drawings and sections. (Submitted under NOA No. 11-0531.09)
- 2. Drawing No. W11-15, titled "Series 5100 Aluminum Fixed Wdw. (L.M.I.)", sheets 1 through 7 of 7, dated 03/22/11, with revision D dated 05/06/15, prepared by Al-Farooq Corporation, signed and sealed by Javad Ahmad, P.E.

### B. TESTS

- 1. Test reports on: 1) Air Infiltration Test, per FBC, TAS 202-94
  - 2) Uniform Static Air Pressure Test, Loading per FBC TAS 202-94
  - 3) Water Resistance Test, per FBC, TAS 202-94
  - 4) Large Missile Impact Test per FBC, TAS 201-94
  - 5) Cyclic Wind Pressure Loading per FBC, TAS 203-94

along with marked-up drawings and installation diagram of an aluminum fixed casement window, prepared by Fenestration Testing Laboratory, Inc., Test Reports No. FTL-6294 and FTL-6295, dated 02/25/11 and 03/16/11 respectively, both signed and sealed by Marlin D. Brinson, P.E.

(Submitted under NOA No. 11-0531.09)

## C. CALCULATIONS

- 1. Anchor verification calculations and structural analysis, complying with FBC-5<sup>th</sup> Edition (2014), dated 10/28/14, prepared by Al-Farooq Corporation, signed and sealed by Javad Ahmad, P.E.
- 2. Glazing complies with ASTM E1300-09

#### D. QUALITY ASSURANCE

1. Miami-Dade Department of Regulatory and Economic Resources (RER).

## E. MATERIAL CERTIFICATIONS

- 1. Notice of Acceptance No. 13-0129.27 issued to E.I. DuPont DeNemours & Co., Inc. for their "DuPont Butacite® PVB Interlayer" dated 04/11/13, expiring on 12/11/16.
- 2. Notice of Acceptance No. 11-0624.02 issued to E.I. DuPont DeNemours & Co., Inc. for their "DuPont SentryGlas® Interlayer" dated 08/25/11, expiring on 01/14/17.

Manuel Perez, P.E. Product Control Examiner NOA No. 15-0129.04

Expiration Date: September 22, 2016

Approval Date: May 14, 2015

## ES Windows, LLC

## NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

#### F. STATEMENTS

- 1. Statement letter of conformance, complying with FBC-5<sup>th</sup> Edition (2014), and of no financial interest, dated October 28, 2014, issued by Al-Farooq Corporation, signed and sealed by Javad Ahmad, P.E.
- 2. Laboratory compliance letter for Test Reports No. FTL-6294 and FTL-6295, issued by Fenestration Testing Laboratory, Inc., dated 02/25/11 and 03/16/11 respectively, both signed and sealed by Marlin D. Brinson, P.E. (Submitted under NOA No. 11-0531.09)

## G. OTHERS

1. Notice of Acceptance No. 12-0223.43, issued to ES Windows, LLC, for their Series "5100 Casement" Aluminum Fixed Window - L.M.I., approved on 05/24/12 and expiring on 09/22/16.

Manuel Perez P.E.
Product Control Examiner
NOA No. 15-0129.04

Expiration Date: September 22, 2016 Approval Date: May 14, 2015

# SERIES 5100 ALUMINUM FIXED WINDOW

DESIGN LOAD RATINGS FOR THESE WINDOWS TO BE AS PER CHARTS SHOWN ON SHEETS 2.

APPROVAL APPLIES TO SINGLE UNITS OR SIDE BY SIDE COMBINATIONS OF FIX./FIX. OR FIXED WITH SERIES 5000 CASEMENT WINDOWS USING MULLIONS IN BETWEEN. LOWER DESIGN PRESSURE FROM CASEMENT WINDOW, FIXED WINDOW OR MULLION CHART WILL APPLY TO ENTIRE SYSTEM.

THIS PRODUCT HAS BEEN DESIGNED AND TESTED TO COMPLY WITH THE REQUIREMENTS OF THE FLORIDA BUILDING CODE INCLUDING HIGH VELOCITY HURRICANE ZONE (HVHZ).

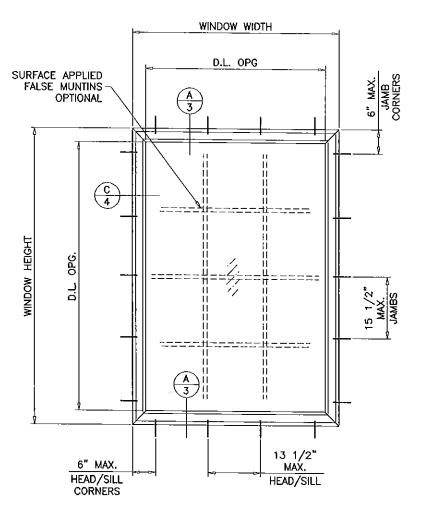
WOOD BUCKS BY OTHERS, MUST BE ANCHORED PROPERLY TO TRANSFER LOADS TO THE STRUCTURE.

ANCHORS SHALL BE AS LISTED, SPACED AS SHOWN ON DETAILS, ANCHORS EMBEDMENT TO BASE MATERIAL SHALL BE BEYOND WALL DRESSING OR STUCCO.

ANCHORING OR LOADING CONDITIONS NOT SHOWN IN THESE DETAILS ARE NOT PART OF THIS APPROVAL.

A LOAD DURATION INCREASE IS USED IN DESIGN OF ANCHORS INTO WOOD ONLY.

MATERIALS INCLUDING BUT NOT LIMITED TO STEEL/METAL SCREWS, THAT COME INTO CONTACT WITH OTHER DISSIMILAR MATERIALS SHALL MEET THE REQUIREMENTS OF THE FLORIDA BLDG. CODE.



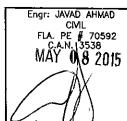
TYPICAL ELEVATION

DAYLITE OPENINGS:

D.L.O. HEIGHT = WINDOW HEIGHT - 6.9375"

D.L.O. WIDTH = WINDOW WIDTH -6.9375"

THESE WINDOWS ARE RATED FOR LARGE & SMALL MISSILE IMPACT. SHUTTERS ARE NOT REQUIRED.



PRODUCT REVISED as complying with the Florida **Building Code** Acceptance No 15-0129.04 Expiration Date 5007.02.2016

Miami Dade Product Control

03-22drawing no. W11-15

sheet 1 of 7

**€** 2 4 8 0 0

AL-FARODQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
1235 S.W. 87 AVE
MIAMI, FLORIDA 33174
TEL (305) 264-8100 FAX (305) 262-6978

(L.M.I.)

WDW.

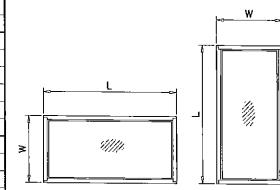
(305)

E.S. WINDOWS, LLC
3550 N.W. 49 STREET
MIAMI, FL. 33142
TEL (305) 638-5151 FAX. (305)

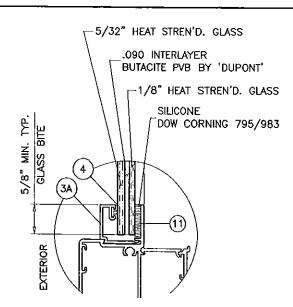
MAY 08 2015

DESI	GN LOAD CA	APACITY -	PSF	DESI	GN LOAD	
WINDOW	V DIMS.	GLASS 'C', 'D',		WINDOW DIMS.		
WIDTH (W)	LENGTH (L)	EXT.(+)	1NT.(-)	WIDTH (W)	LENGTH	
24"		90.0	90.0	19-1/8"		
30"		90.0	90.0	26-1/2"		
36"		90.0	90.0	37"		
42"	42 <b>"</b>	90.0	90.0	48"	26"	
48"		90.0	90.0	53-1/8"		
54"		90.0	90.0	62"		
60"		90.0	90.0	19-1/8*		
62"		90.0	90.0	26-1/2°		
24"		90.0	90.0	37"	70 7/2	
30°		90.0	90.0	48"	38-3/8	
36°		90.0	90.0	53-1/8"		
42°	48*	90.0	90.0	62"		
48°		90.0	90.0	19-1/8"	-	
54 <b>"</b>		90.0	90.0	26-1/2"		
60°		90.0	90.0	37"		
62*		90.0	90.0	48"	50-5/8	
24"		90.0	90.0	53-1/8"		
30"		90.0	90.0	62"		
36"		90.0	90.0	19-1/8	i	
42°	54°	90.0	90.0	26-1/2"		
48"		90.0	90.0	37"	_	
54"		88.5	88.5	48"	63"	
60"		88.5	88.5	53-1/8"		
62"		88.5	88.5	62"		
24"		90.0	90.0	19-1/8		
30°		90.0	90.0	26-1/2"		
36"		90.0	90.0	37"	74-1/4	
42"	60"	90.0	90.0	48"	' ' '	
48"		90.0	90.0	53-1/8"		
54"		88.5	88.5	19-1/8"		
60"		79.7	79.7	26-1/2"		
62°		79.7	79.7	37"	76"	
24"		90.0	90.0	48"	'*	
30°		90.0	90.0	51"		
36"		90.0	90.0	<del></del> -	<u> </u>	
42"	66"	90.0	90.0			
48"		90.0	90.0			
54"		88.5	88.5			
59°		81.0	81.0			
24°		90.0	90.0			
30°		90.0	90.0	1		
36"		90.0	90.0	1		
42"	72*	90.0	90.0	<del> </del>	L	
48"		90.0	90.0			
54"		88.5	88.5	<u>                                    </u>		
24"		90.0	90.0	<b>1</b> _∫ ∭	411	
30 <b>"</b>		90.0	90.0	≥	47	
36"		90.0	90.0	<b>!</b>		
42"	76 <b>"</b>	90.0	<del> </del> -	<u> </u>		
42 48"		90.0	90.0	NOTE:		
40 51°		· — —	90.0	WIDTH A	ND LENG	
ગ	L	90.0	90.0	J VERTICAL	LY OR H	

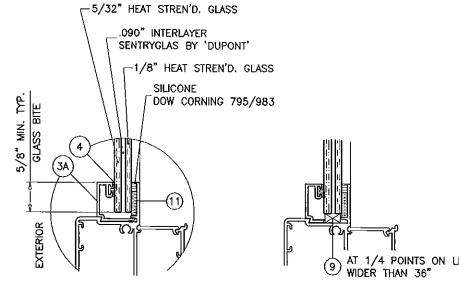
╝	DESIGN LOAD CAPACITY - PSF								
	WINDOY	V DIMS.	GLASS TYPES 'C', 'D', 'E' & 'F'						
	WIDTH (W)	LENGTH (L)	EXT.(+)	1NT.(~)					
1	19-1/8"		90.0	90.0					
1	26-1/2"		90.0	90.0					
1	37"	0.07	90.0	90.0					
1	48"	26"	90.0	90.0					
7	53-1/8"		90.0	90.0					
	62"		90.0	90.0					
7	19-1/8*		90.0	90.0					
brack	26-1/2°		90.0	90.0					
]	37"	79_7/o"	90.0	90.0					
	48"	38-3/8"	90.0	90.0					
]	53-1/8"		90.0	90.0					
	62"		90.0	90.0					
]	19-1/8"	-	90.0	90.0					
	26-1/2"		90.0	90.0					
	37°	50~5/8"	90.0	90.0					
	48"	30~3/8	90.0	90.0					
	53-1/8"		90.0	90.0					
	62"		90.0	90.0					
]	19-1/8		90.0	90.0					
	26-1/2"		90.0	90.0					
	37"	ca"	90.0	90.0					
	48"	63"	90.0	90.0					
]	53-1/8"		90.0	90.0					
	62"		77.1	77.1					
]	19-1/8		90.0	90.0					
	26-1/2"		90.0	90.0					
	37"	74-1/4"	90.0	90.0					
	48"		90.0	90.0					
	53-1/8"		90.0	90.0					
╛	19-1/8"		90.0	90.0					
	26-1/2"		90.0	90.0					
╛	37"	76"	90.0	90.0					
╝	48"		90.0	90.0					
	51"		90.0	90.0					



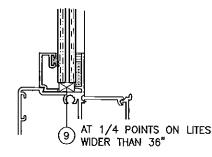
WIDTH AND LENGTH DIMENSIONS CAN BE ORIENTED VERTICALLY OR HORIZONTALLY AS SHOWN ABOVE.



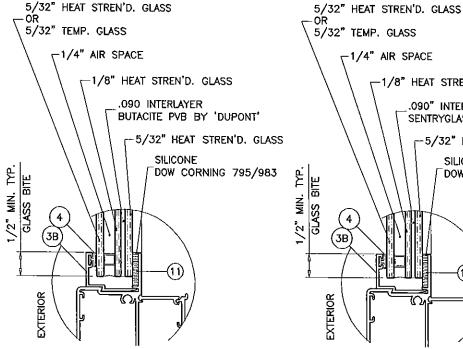
GLASS TYPE 'C'



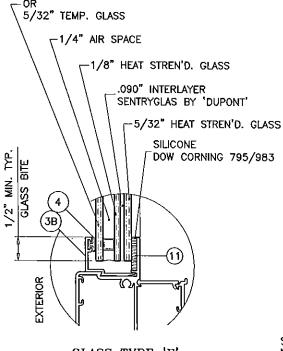
GLASS TYPE 'D'



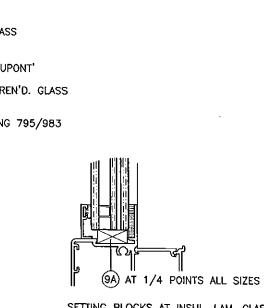
SETTING BLOCKS AT LAM. GLASS NOTCH GLAZING BEAD LEG TO CLEAR BLOCKS



GLASS TYPE 'E'



GLASS TYPE 'F'

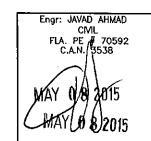


SETTING BLOCKS AT INSUL. LAM. GLASS NOTCH GLAZING BEAD LEG TO CLEAR BLOCKS

# **GLAZING OPTIONS**

NOTE: TO QUALIFY FOR SMALL MISSILE IMPACT RATING EXTERIOR PLY OF GLASS TYPES 'E' & 'F' MUST BE TEMPERED.

GLASS CAPACITIES ON THIS SHEET ARE BASED ON ASTM E1300-09 (3 SEC. GUSTS).



PRODUCT REVISED as complying with the Florida
Building Code
Acceptance No 15-0129.04.
Expiration Date 5201.22, 2016

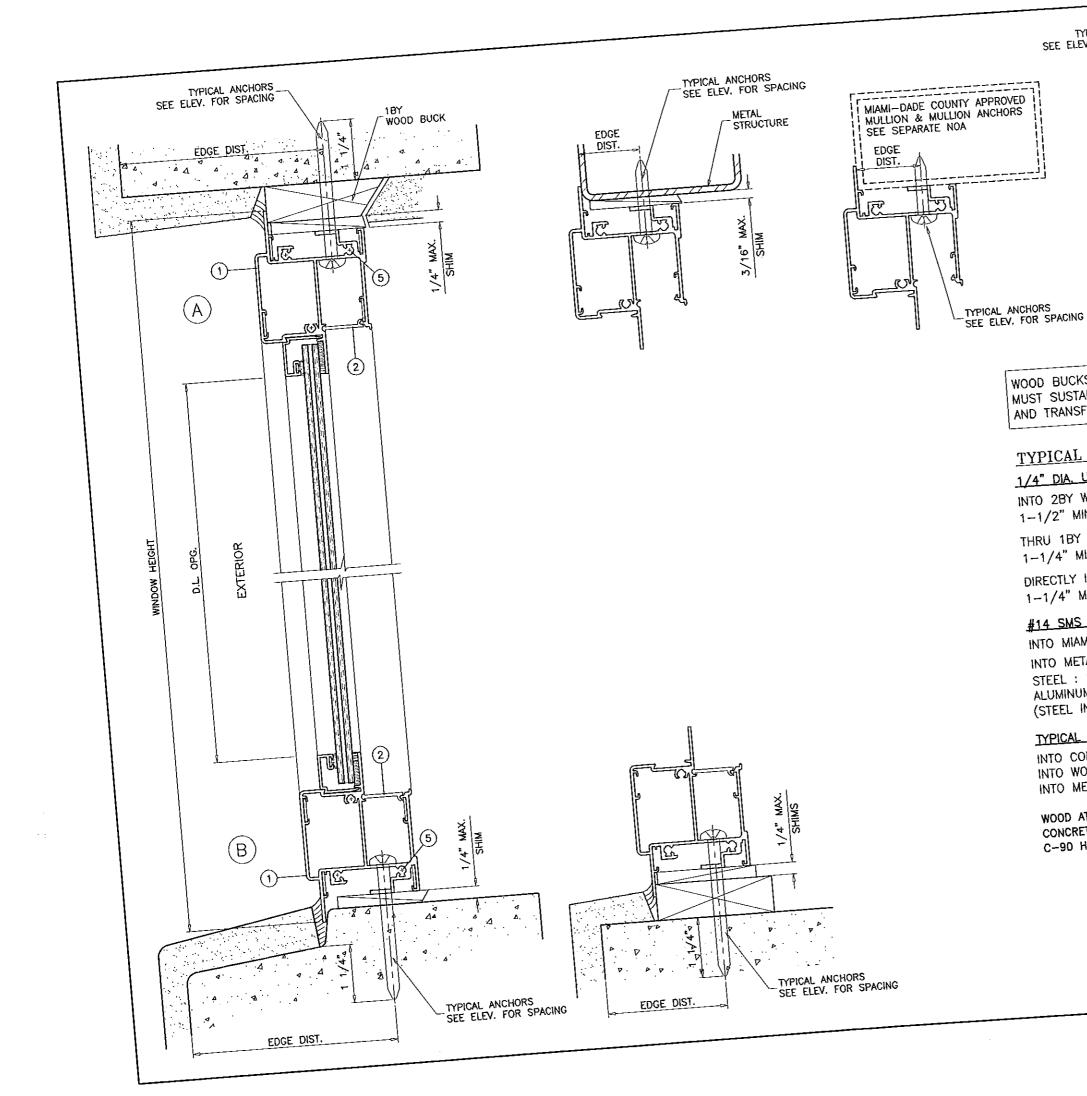
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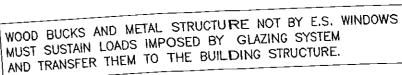
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SERIES 5100 ALUMINUM FIXED V E.S. WINDOWS, LLC 3550 N.W. 49 STREET MIAMI, FL. 33142 TEL. (305) 638-5151 FAX. (305)

AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
1235 S.W. 87 AVE
MIAMI, FLORIDA 33174
TEL. (305) 262-6978

drawing no. W11 - 15sheet 2 of 7





EDGE DIS

TYPICAL ANCHORS: SEE ELEV. FOR SPACING 1/4" DIA. ULTRACON BY 'ELCO' (Fu=177 KSI, Fy=155 KSI) INTO 2BY WOOD BUCKS OR WOOD STRUCTURES 1-1/2" MIN. PENETRATION INTO WOOD THRU 1BY BUCKS INTO CONC. OR MASONRY 1-1/4" MIN. EMBED INTO CONC. OR MASONRY

DIRECTLY INTO CONC. OR MASONRY 1-1/4" MIN. EMBED INTO CONC. OR MASONRY

#14 SMS OR SELF DRILLING SCREWS (GRADE 2 CRS) INTO MIAMI-DADE COUNTY APPROVED MULLIONS (MIN. THK. = .090") INTO METAL STRUCTURES

STEEL: 12 GA. MIN. (Fy = 36 KSI MIN.) ALUMINUM : 1/8" THK. MIN. (6063-T5 MIN.) (STEEL IN CONTACT WITH ALUMINUM TO BE PLATED OR PAINTED)

# TYPICAL EDGE DISTANCE

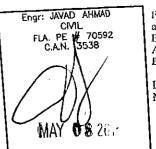
TYPICAL ANCHORS SEE ELEV. FOR SPACING

INTO CONCRETE AND MASONRY = 2" MIN. INTO WOOD STRUCTURE = 1" MIN. INTO METAL STRUCTURE = 3/4" MIN.

WOOD AT HEAD, SILL OR JAMBS SG = 0.55 MIN. WOUD AT HEAD, SILL OR JAMBS 1'C = 3000 PSI MIN.

CONCRETE AT HEAD, SILL OR JAMBS 1'C = 3000 PSI MIN.

C-90 HOLLOW/FILLED BLOCK AT JAMBS 1'M = 2000 PSI MIN.



PRODUCT REVISED as complying with the Florida
Building Code

Building Code
Acceptance No 15-0129.04
Expiration Date Sept. 22, 2016
By Wawley Structure Miami/Dade Product Control

CORPORATION DEUCT DEVELOPMENT

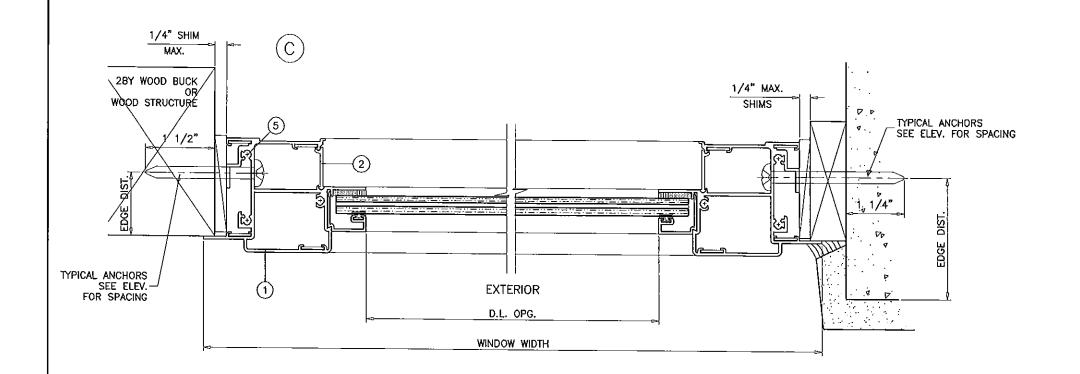
WDW.

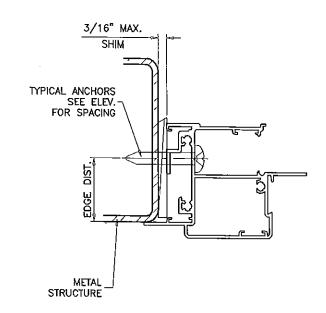
WINDOWS, LLC N.W. 49 STREET i, FL. 33142 305) 638–5151 FAX.

sheet 3 of

1/2" =

03-22-





Engr: JAVAD AHMAD CMIL

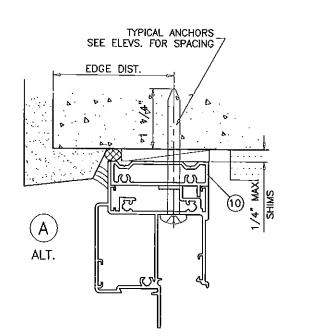
PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No 15-0129.
Expiration Date Sept. 22.

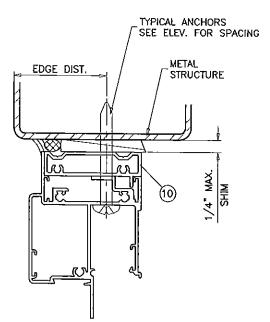
By Manual State
Miami/Dade Product Control

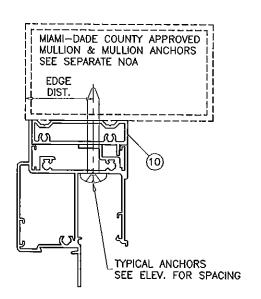
	revisions:	no date	A 08.03.11	B 02.20.12	C 10.29.14	0 05.06.15	
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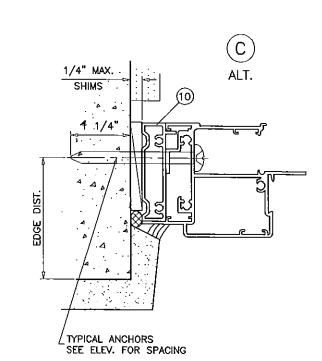
sheet 4 of 7

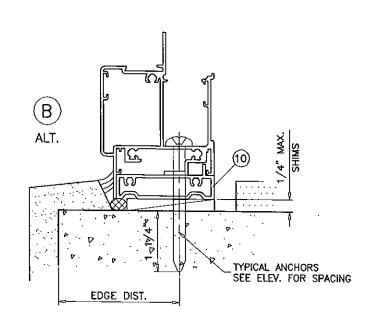
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	AL-FAROOO CORPORATION	DIOT DOVE OBMENT	ENGINEERS & PRODUCT DEVELOPMENT	7.7	ł	FAX. (303) 262-6378	COMP-ANL\W11-1
	AL-FAROOO		100E ON OT AVE	MIAMI FLORIDA 33174		(EL. (303) 204-8100	)(
	WDW. (LM.L.)					_	FAX. (305) 638-5158
	UMINING FIXED		WS, LLC	STRFFT	7.7.2		
	SERIES 5100 ALLIMINIUM FIXED WDW (L.M.L.)		E.S. WINDOWS, LLC	3550 N W 49 STRFFT	MIAM! E! 44140		∬ TEL. (305) 638—5151
		cription	NO CHANGE THIS SHEET	GLAZING DETAIL REV.	NO CHANGE THIS SHEET	REV. PER RER COMMENTS	
	revisions:	date by description	A 08.03.11 NO C	02.20.12 GLAZ	C 10.29.14 NO C	05.06.15 REV.	
	date: 03-22-11		acole: 1/2" = 1" A		dr. by: HAMID C		<u></u>
	date		acal		유.		Chk. by:











Engr: JAVAD AHMAD CIVIL FLA. PE # 70592 C.A.N. 3538 PRODUCT REVISED as complying with the Florida Building Code Acceptance No 15-0129. Expiration Date 5001 By Manuel July Miami/Dade Product Control

03-22-11

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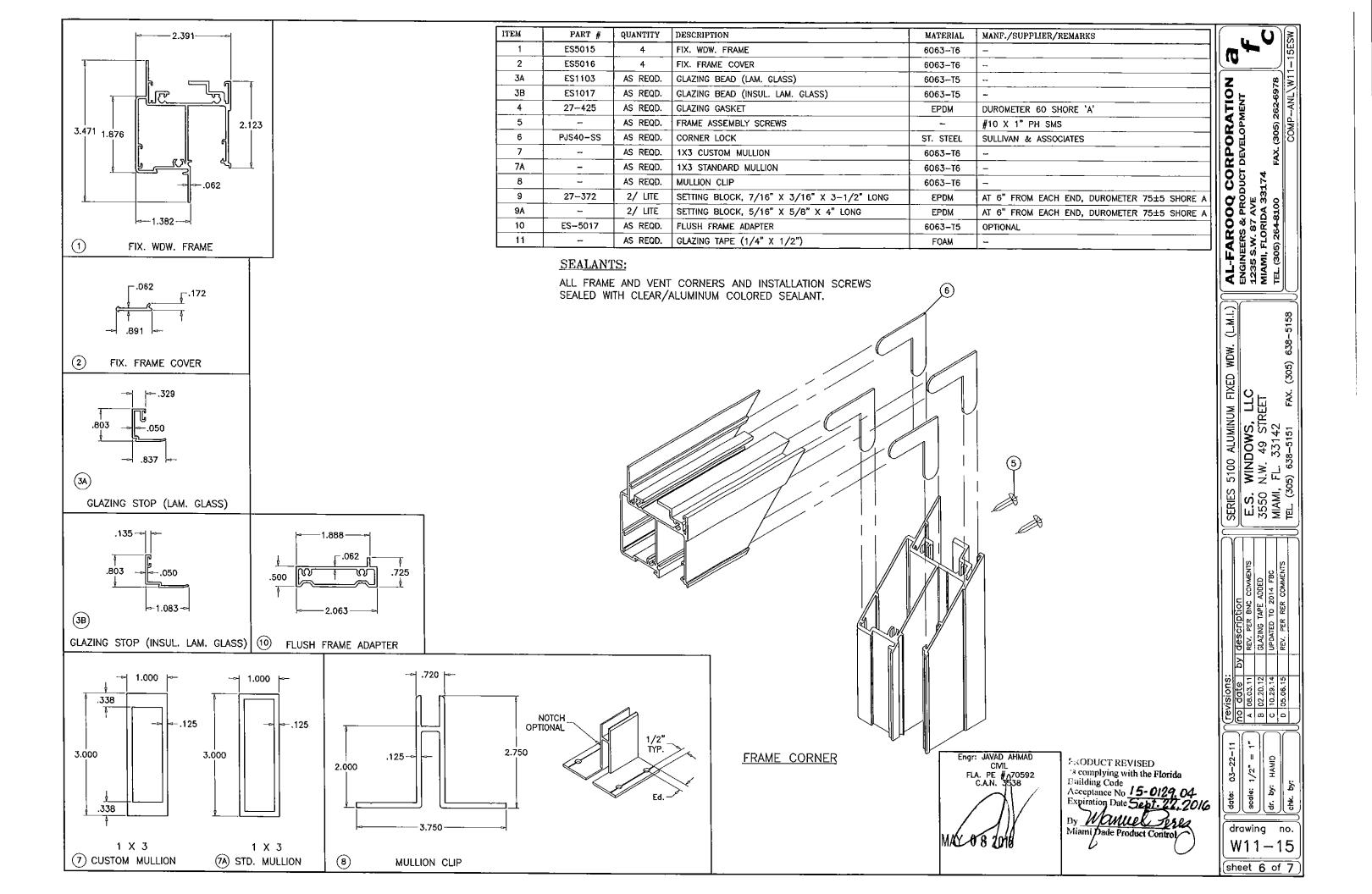
AL-FAROOQ CORPORATION
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(L.M.I.)

E.S. WINDOWS, LLC
3550 N.W. 49 STREET
MIAMI, FL. 33142
TEL (305) 638-5151 FAX. (305) 638-5

-5158

INSTALLATION DETAILS WITH FLUSH FRAME ADAPTER

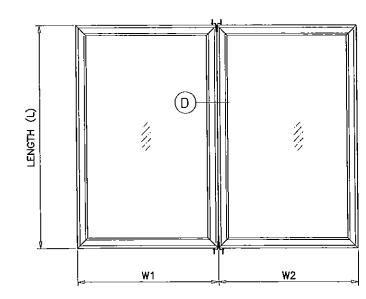


MULLION LOAD CAPACITY - PSF			MULLION LOAD CAPACITY - PSF				
OD NIM	W DIMS.	I X 3 STD. MULL	1 X 3 CUSTON MULL	WINDOW DIMS.		1 X 3 STD, MULL	1 X 3 CUSTOM MULI
WIDTH_(W)	LENGTH (L)	EXT.(+) INT.(~)	EXT.(+) INT.(-)	WIDTH (W)	LENGTH (L)	EXT.(+) INT.(~)	EXT.(+) INT.(-)
26-1/2"		90.0	90.0	30"		90.0	90.0
37"		90.0	90.0	36"		90.0	90.0
42"		90.0	90.0	42"		90.0	90.0
45"	58"	90.0	90.0	48"	54"	90.0	90.0
48"		90.0	90.0	54"		90.0	90.0
53-1/8"		90.0	90.0	60 <b>"</b>		90.0	90.0
62°		90.0	90.0	62"		90.0	90.0
26-1/2"		90.0	90.0	30"		90.0	90.0
37*		90.0	90.0	36"		90.0	90.0
42"		90.0	90.0	42"		90.0	90.0
45°	63"	90.0	90.0	48"	60°	90.0	90.0
48"		90.0	90.0	54"		90.0	90.0
53-1/8"		90.0	90.0	60"		90.0	90.0
62"		90.0	90.0	62°		90.0	90.0
26-1/2"		90.0	90.0	30"	-	90.0	90.0
37"		90.0	90.0	36"		90.0	90.0
42*	74 4/48	82.5	90.0	42"		90.0	90.0
45"	74-1/4"	78.6	90.0	48"	66"	90.0	90.0
48"		75.4	87.4	54"		90.0	90.0
53-1/8"		71.0	83.2	59"		90.0	90.0
26-1/2"		90.0	90.0	30"		90.0	90.0
37"		84.2	90.0	36"		90.0	90.0
42"	76*	76.4	90.0	42"	72"	90.0	90.0
45"	'0	72.8	87.6	48"	~~	83.6	90.0
48"		69.7	84.5	54"		78.4	86.8
51 <b>"</b>		67.1	81.9	30"	-	90.0	90.0
				36"		86.1	90.0
				42"	76 <b>"</b>	76.4	90.0
				48"		69.7	84.5
				51"		67,1	81.9

## NOTES:

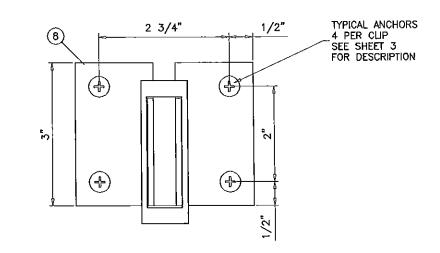
- 1. USE CHART ON THIS SHEET FOR SIDE BY SIDE CONNECTION CAPACITY OF WINDOW MULLION,
- 2. FOR FIXED WINDOW CAPACITY SEE SHEET 2 OF 7.
- 3. LOWER VALUES FROM STEPS 1 OR 2 WILL APPLY TO ENTIRE SYSTEM.

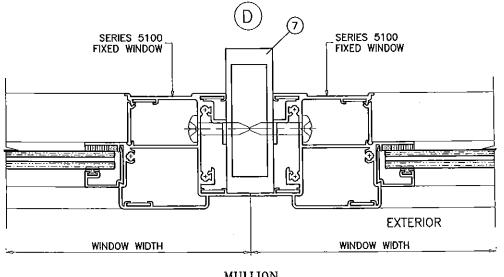
## CLIPPED MULLIONS

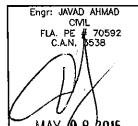


TYPICAL ELEVATION SIDE BY SIDE WINDOWS SIDE BY SIDE APPLIES TO TWO OR MORE WINDOWS

$$WIDTH (W) = \frac{W1 + W2}{2}$$







PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No. 15-0129.04
Expiration Date Sept. 72, 2016
By Manuel Suca
Mismi Dade Product Control

AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
1235 S.W. 87 AVE
MIAMI, FLORIDA 33174
TEL. (305) 264-8100 FAX. (305) 262-6978

638-5158

SERIES 5100 ALUMINUM FIXED WDW. (LE.S. WINDOWS, LLC 3550 N.W. 49 STREET MIAMI, FL. 33142
TEL. (305) 638-5151 FAX. (305) 638-8

| Cevisions: | Cev

| date: 03–22–1 | sode: 1/2" = | | dr. by: HAMID | chk. by:

drawing no. W11 - 15

sheet 7 of 7

MAY (0 8 2015

MULLION